

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

I claim:

1. (Previously Presented) A method of providing authentication for a network-based transaction, the method comprising:

presenting a first information set to a user through a first device accessible to the user, such first device being an Internet access device, the first information set being associated with the transaction and communicated to said first device over a first communication network;

obtaining a second information set using authentication/authorization resources used in a second communication network, such second communication network being the public land mobile network (PLMN) which is separate from the first communication network;

creating a coupling between the first information set and the second information set, wherein the second information set is also associated with the transaction;

presenting the second information set to the user through a second device being a mobile terminal separate from the first device and requesting authorization of the transaction at the second device using the PLMN while the transaction is pending at the first device; and

receiving authorization information for the transaction from the second device over the PLMN wherein in response to said authorization, providing said transaction to said user using said first device over said first communication network.

2. (Previously Presented) The method of claim 1 wherein creating the coupling further comprises sending a wireless application protocol (WAP) push message to the second device.

3. (Original) The method of claim 1 wherein the authorization information comprises client-side public key infrastructure (PKI) information.

4. (Original) The method of claim 2 wherein the authorization information comprises client-side public key infrastructure (PKI) information.

5. (Original) The method of claim 1 wherein the authorization information comprises a password.

6. (Previously Presented) The method of claim 5 wherein the authorization information further comprises a caller line identification (caller ID) for the second device.

7. (Previously Presented) A method of authorizing a transaction in which transaction information is presented to a user at first device coupled to a first communication network, in a first information set in a first format suitable for presentation on the first device wherein said first information set is communicated to said first device over the first communication network, the method comprising:

while the transaction is pending at the first device, creating a second information set in a second format suitable for presentation at a second device, being a mobile terminal, wherein the second information set is representative of, and correlated to, the first information set;

linking the first information set and the second information set;

sending the second information set to said second device using a second communication network, the second communication network being the public land mobile network (PLMN) which is separate from the first communication network;

receiving authentication information from the second device through the PLMN;
and

providing said transaction to said user using said first device over said first communication network in response to said step of receiving said authentication information.

8. (Previously Presented) The method of claim 7 wherein linking the first information set and the second information set further comprises sending a wireless application protocol (WAP) push message to the second device.

9. (Original) The method of claim 8 wherein the WAP push message comprises a hyperlink to the second information set.

10. (Original) The method of claim 9 wherein the first information set is formatted in hypertext markup language (HTML) and the second information set is formatted in wireless markup language (WML).

11. (Original) The method of claim 10 wherein the second information set is further formatted to be signed by a user using a WAP signText script.

12. (Original) The method of claim 7 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

13. (Original) The method of claim 8 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

14. (Original) The method of claim 9 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

15. (Original) The method of claim 10 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

16. (Previously Presented) Apparatus for providing authentication for a network-based transaction, the apparatus comprising:

means for presenting a first information set to a user through first device, being an Internet access device, the first information set being associated with the transaction and communicated over to said first device over a first communication network;

means for obtaining a second information set using authentication/authorization resources used in a second communication network, such second communication network being the public land mobile network (PLMN) which is separate from the first communication network;

means for creating a coupling between the first information set and the second information set, wherein the second information set is also associated with the transaction;

means for presenting the second information set to the user and requesting authorization of the transaction at a second device comprising a mobile terminal using a the PLMN; and

means for receiving authorization information for the transaction from the second device over the PLMN while the transaction is pending at the first device wherein in response to said authorization, providing said transaction using said first device over said first communication network.

17. (Previously Presented) Apparatus for authorizing a transaction in which transaction information is presented to a user at a first device being an Internet access device in a first information set in a first format suitable for presentation on the first device wherein said first information set is communicated over to said first device over a first communication network, the apparatus comprising:

means for creating a second information set in a second format suitable for presentation at a second device being a mobile terminal, wherein the second information set is representative of the first information set;

means for linking the first information set and the second information set;

means for sending the second information set to said second device over a second communication network being a public land mobile network (PLMN) which is separate from the first communication network;

means for receiving authentication information from the second device through the PLMN; and

means for providing said transaction to said user at said first device over said first communication network in response to receiving said authentication information.

18. (Previously Presented) A computer program product comprising a computer for authorizing a transaction in which transaction information is presented to a user at a first device being an Internet access device in a first information set in a first format suitable for presentation on the first device wherein said first information set is communicated over to said first device over a first communication network, the computer program further comprising:

instructions for creating a second information set in a second format suitable for presentation at a second device being a mobile terminal, wherein the second information set is representative of the first information set;

instructions for linking the first information set and the second information set;

instructions for sending the second information set to said second device over a second communications network being a public land mobile network (PLMN) which is separate from the first communication network;

instructions for receiving authentication information from the second device through the PLMN while the transaction is pending at the first device; and

instructions for providing said transaction to said user at said first device over said first communication network in response to said step of receiving said authentication information.

19. (Previously Presented) The computer program product of claim 18 wherein the instructions for linking the first information set and the second information set further comprise instructions for sending a wireless application protocol (WAP) push message to the second device.

20. (Original) The computer program product of claim 19 wherein the WAP push message comprises a hyperlink to the second information set.

21. (Original) The computer program product of claim 20 wherein the first information set is formatted in hypertext markup language (HTML) and the second information is formatted in wireless markup language (WML).

22. (Original) The computer program product of claim 21 wherein the second information set is further formatted to be signed by a user using a WAP signText script.

23. (Original) The computer program product of claim 18 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

24. (Original) The computer program product of claim 19 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

25. (Original) The computer program product of claim 20 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

26. (Original) The computer program product of claim 21 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

27. (Previously Presented) A network that enables authentication of a transaction comprising:

a server system operable to create a first information set formatted for a first device being an Internet access device and a second information set formatted for a second device being a mobile terminal, the second information set representative of the first information set which is in turn representative of the transaction, the server system further operable to create a coupling between the first information set and the second information set wherein said first information set is communicated to said first device over a first communications network being a wireline communication network;

an Internet connection at the server system;

a second communications network being a public land mobile network (PLMN) which is separate from the first communications network operatively connected to the server system to communicate the second information set to said second device and obtain authorization information from the second device while the transaction is pending at the first device so that the transaction can be authenticated by the server system wherein in response to obtaining such authorization information, said server providing said transaction to said user at said first device over said wireline communication network; and

wherein said first device and said second device are two separate devices.

28. (Previously Presented) The network of claim 27 wherein creating the coupling between the first information set and the second information set is accomplished at least in part by sending a wireless application protocol (WAP) push message to the second device.

29. (Original) The network of claim 28 wherein the WAP push message comprises a hyperlink to the second information set.

30. (Original) The network of claim 27 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

31. (Original) The network of claim 28 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

32. (Original) The network of claim 29 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

33. (Previously Presented) A system for authorizing a transaction in which transaction information is presented to a user at a first device being an Internet access device in a first information set in a first format suitable for presentation on the first device, the system comprising:

a hypertext markup language (HTML) server operable to provide content for the first information set and to create a coupling between the first information set and a second information set wherein said first information set is communicated over to said first device over a first communications network being a wireline communication network;

a wireless markup language (WML) server operable to create the second information set in a format suitable for presentation on a second device being a wireless terminal, wherein the second information set is representative of the first information set, the WML server operatively connected to the HTML server;

a network connection for the system operable to enable the WML server to send the second information set over a second communications network being a public land mobile network (PLMN), which is separate from the first communications network, for presentation to the user at the second device while the transaction is pending at the first device, and receive authentication information from the second device and wherein in

response to receiving said authentication information, providing said transaction to said user at said first device over said first communication network; and

wherein said first device and said second device being two separate devices.

34. (Original) The system of claim 33 wherein the WML server and the HTML server operate on a single computing platform.

35. (Previously Presented) The system of claim 33 wherein the first communications network is the Internet.

36. (Previously Presented) The system of claim 33 wherein the coupling is created at least in part by sending a wireless application protocol (WAP) push message to the second device.

37. (Previously Presented) The system of claim 34 wherein the coupling is created at least in part by sending a wireless application protocol (WAP) push message to the second device.

38. (Previously Presented) The system of claim 35 wherein the coupling is created at least in part by sending a wireless application protocol (WAP) push message to the second device.

39. (Original) The system of claim 33 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

40. (Original) The system of claim 34 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

41. (Original) The system of claim 35 wherein the authentication information comprises client-side public key infrastructure (PKI) information.

42. (Original) The system of claim 36 wherein the authentication information comprises client-side public key infrastructure (PKI) information.